RETAIN OR DESTROY AS REQUIRED

Office of the Assistant Secretary of Defense for
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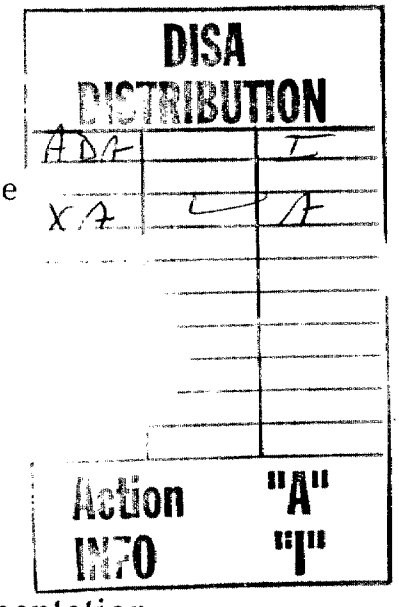

Thursday, August 27, 1992

To: Denis Brown
From: Paul Strassmann
Subject: Distributed Client/Server Architecture

Today I reviewed the status of the JCALS technical implementation.

The Computer Sciences Corporation has made remarkable progress on a **survivable, secure, distributed, open systems, client/server implementation** for JCALS, inclusive of generic tools and data base management methods. Their general approach to data base management and data migration has potential applicability to a wide range of DoD applications.

CSC appears to have ready solutions to the tasking previously given to the DISA Technology Integration [TIM] organization. CSC's approach to securing the integrity of legacy systems during migration is noteworthy. Their network management operation removes much of the local support labor to central systems control.

I would appreciate if your staff, with participation from Kurt Fischer, prepare not later than by September 31, an assessment of the potential of using key elements of the CSC software solutions as a target "open systems" template for CIM applications. I would also appreciate hearing at that time when the large JCALS data dictionary migrates to the DISA data repository.

Thanks.

Paul

ic: M.Gen. Baldwin, DDI Deputies, Mestrovich, Jeffcoat, Knecht, Schanzer, Lt.Gen. Short, G.White

DUE 4 Sep
CODE RESPONSE SUSPENSE 23 Sep

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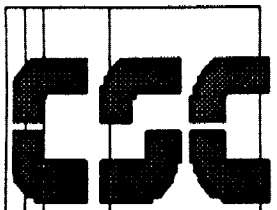


Global Data Management System

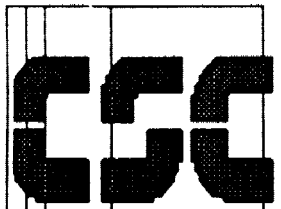
Provides timely, authorized access to accurate, current data anywhere in the system regardless of where it is stored, how it is formatted or how it is accessed

JCALS GLOBAL DATA MANAGEMENT SYSTEM

FEATURES	BENEFITS
Supports development, management and extensibility of IWSDB	Allows system evolution and growth
Provides Interrelatability Function	Increased accuracy of information, higher reliability/dependability
DBMS, Data Structure and Data Model Independent	Maintenance costs of database applications reduced 70%
Support Controlled Replication	Better response time to individual queries.
Supports Security	Authorized access control protects sensitive data and provides accountability

JCALS GLOBAL DATA MANAGEMENT SYSTEM

FEATURES	BENEFITS
Supports location transparency of data	Ease of use
Data distribution and dynamic redistribution	High availability
Supports integration of existing systems in a non-intrusive manner	Capitalizes on large number of existing systems Saves time and money
Supports Very Large Databases (VLDB)	Supports new weapon systems with large data requirements
Provides distributed, multidatabase concurrency control and trans. recovery	Maintains and enforces strict data integrity



INTEGRATING LEGACY SYSTEMS UNDER JOINT CALS

- **Integration of legacy systems**
  - NON-INTRUSIVE
  - CANNOT DEPEND ON FUNCTIONALITY
  - CANNOT DEPEND ON STANDARDIZATION
  - HANDLES PROBLEMATIC DATA
- **Joint CALS supports multiple integration techniques**
  - RUN EXISTING APPLICATIONS
  - TERMINAL EMULATION
  - DBMS INTERFACE

JCALS SUPPORTS THREE SCHEMA DATA MODEL